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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,440	02/24/2005	Jilly Evans	21217YP	5788

210 7590 03/18/2008
MERCK AND CO., INC
P O BOX 2000
RAHWAY, NJ 07065-0907

EXAMINER	
HOLLOMAN, NANNETTE	

ART UNIT	PAPER NUMBER
4131	

MAIL DATE	DELIVERY MODE
03/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,440	EVANS ET AL.	
	Examiner	Art Unit	
	NANNETTE HOLLOMAN	4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 9-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 & 9-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02 Sep 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-7 and 9-21 are pending.

The Preliminary Amendment filed on February 24, 2005 cancelling claim 8 has been received and entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7 and 9-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification, while being enabling for the method of reducing the risk of atherosclerotic plaque rupture or reducing the risk of developing atherosclerosis, does not reasonable provide enablement for "preventing" the risk of atherosclerotic plaque rupture or "preventing" developing atherosclerosis.

In evaluating the enablement question, several factors are to be considered. Note *In re Wands,* 8 USPQ2d 1400 and *Ex parte Forman,* 230 USPQ 546. The factors include: 1) The nature of the invention, 2) the state of the prior art, 3) the predictability or lack thereof in the art, 4) the amount of direction or guidance present, 5) the presence or absence of working examples, 6) the breadth of the claims, and 7) The

quantity of experimentation needed. The determination that "undue experimentation" would have been needed to make and use the claimed invention is not a single, simple factual determination. Rather, it is a conclusion reached by weighing all the above noted factual considerations.

The instant claims 1-7 and 9-20 recite administering to a patient in need; claims 11-16 and 19-20 recite "preventing". The specification fails to enable one skilled in the art for the recited use in the instant claims.

There is no disclosure regarding how the patient in need of treatment is identified and further, how atherosclerosis and atherosclerotic plaque are treated. "The actual cause of atherosclerosis isn't known. However, certain traits, conditions, or habits may raise your chance of developing", as stated by the National Institutes of Health website (Atherosclerosis: Who Is at Risk for Atherosclerosis?) This establishes the unpredictability of the art regarding the treatment of patients in need.

Claims 11-16 and 19-20 recite "preventing" the risk of atherosclerotic plaques rupture or the risk of developing atherosclerosis. "To prevent" actually means *to anticipate or counter in advance, to keep from happening etc.* (as per Websters II Dictionary) and therefore it is not understood how one skilled in the art can reasonably establish the basis and the type of subject to which the instant compound can be administered in order to have the "preventing" effect.

Thus, factors such as "sufficient working examples", "the level of skill in the art" and "predictability" have been demonstrated to be sufficiently lacking in the use of the invention. In view of the chemical nature of the invention, the unpredictability of

determining patients in need, and the lack of working examples regarding the treatment, one having ordinary skill in the art would have to undergo undue experimentation to use the invention as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prasit et al. (U. S. Patent # 5204344, cited by Applicant) and Allen et al. (Differential Leukotriene Constrictor Responses in Human Atherosclerotic Coronary Arteries, AHA, pgs 2406-2413, As Sited by Applicant) and further in view of Winokur (U. S. Patent # 6245797). Prasit et al. teaches the use of 3-[N-(p-chlorobenzyl)-3-(t-butylthio)-5-(quinolin-2-ylmethoxy)indol-2-yl]-2,2-dimethylpropanaic acid (further called

Mk591) which is the same compound claimed. Prasit et al. further teaches that Mk591 is a leukotriene biosynthesis inhibitor (Abstract). Prasit et al. teaches a pharmaceutical composition of Mk591 and an additional agent, see claim 13.

Prasit et al. does not disclose the use of MK591 for the treatment of artherosclerosis.

Allen et al. teaches that atherosclerosis is associated with the appearance of a leukotriene receptor capable of inducing hyperreactivity of human epicardial coronary arteries. Allen et al. also discloses that patients with coronary artery disease have raised levels of leukotrienes and suggest that endogenous leukotrienes play a role in the manifestation of atherosclerosis (pg 2412, last paragraph).

Winokur teaches the use of a HMG-CoA reductase inhibitor in combination with a COX-2 inhibitor to treat or reduce the risk of developing atherosclerosis (column 2, lines 55-60). Winokur also teaches the use of HMG-CoA reductase inhibitor class is known to slow the progression of atherosclerotic lesions. When used in combination therapy, the COX-2 inhibitor together with the HMG-CoA reductase inhibitor provide enhanced treatment options as compared to administration of either alone.

It would have been prima facie obvious to one skilled in the art at the time of the invention to use Mk591 as taught by Prasit et al. as an inhibitor of leukotriene in the role it serves in the manifestation of atherosclerosis as taught by Allen et al. and to combine said previous therapy with the teachings of Winokur.

It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be

used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). The An ordinary practitioner would have been motivated to use Mk591 as taught by Prasit et al. to treat artherosclerosis in light of the findings of the role leukotriene serves in atherosclerosis and taught by Allen et al in combination with the combined therapy taught by Winokur.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANNETTE HOLLOMAN whose telephone number is (571) 270-5231. The examiner can normally be reached on Mon-Fri 730-500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867 or Cecilia Tsang on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NANNETTE HOLLOMAN/
Examiner, Art Unit 4131

/Cecilia Tsang/

Supervisory Patent Examiner, Art Unit 4131